## CLAIMS

1. A method for inducing a population of $CD8^+$ T cells to proliferate, comprising:

a) activating a population of T cells; and

b) stimulating a CD9 antigen on the surface of the T cells with a ligand which binds the CD9 antigen, the activating and stimulating steps thereby inducing proliferation of the T cells.

2. The method of claim 1, wherein the population of T cells is activated by contacting the T cells with an anti-CD3 antibody.

3. The method of claim 2, wherein anti-CD3 antibody is an anti-human CD3 monoclonal antibody.

4. The method of claim 3, wherein the anti-CD3 antibody is immobilized on a solid phase surface.

5. The method of claim 1, wherein the population of T cells is activated by contacting the T cells with an anti-CD2 antibody.

6. The method of claim 1, wherein the population of T cells is activated by contacting the T cells with a protein kinase C activator and a calcium ionophore.

7. The method of claim 1, wherein the ligand binds a peptide comprising an amino acid sequence

$(Xaa_1)_n$-Gly-$Xaa_2$-Trp-Leu-$Xaa_3$-$Xaa_4$-Asp(Glu)-$(Xaa_5)_n$ (SEQ ID NO: 5), wherein $Xaa_4$ may or may not be present, $Xaa_1$, $Xaa_2$, $Xaa_3$, $Xaa_4$ and $Xaa_5$ are any amino acid residue and n = 0-20.

8. The method of claim 7, wherein $Xaa_2$ is Cys, Ile or Leu, $Xaa_3$ is Leu or Arg and $Xaa_4$, if present, is Arg, Pro or Phe.

9. The method of claim 2, wherein the ligand is a monoclonal antibody ES5.2D8.

10. The method of claim 1, further comprising contacting the T cells with an antigen or portion thereof.

11. The method of claim 1, further comprising

c) monitoring proliferation of the T cells in response to continuing exposure to the ligand; and

d) reactivating and restimulating the T cells when the rate of T cell proliferation has decreased to induce further proliferation of the T cells.

12. The method of claim 11, further comprising repeating the steps (c)-(d) to produce a population of T cells increased in number of from about 100- to about 100,000-fold the original T cell population

13. The method of claim 9, further comprising

c) monitoring proliferation of the T cells in response to continuing exposure to the monoclonal antibody ES5.2D8; and

d) restimulating the T cells with the anti-CD3 antibody and the monoclonal antibody ES5.2D8 when the rate of T cell proliferation has decreased to induce further proliferation of the T cells.

14. The method of claim 13, further comprising repeating steps (c)-(d) to produce a population of T cells increased in number of from about 100- to about 100,000-fold the original T cell population.

15. A method for stimulating a population of $CD8^+$ T cell to proliferate, comprising

a) contacting a population of T cells with

(1) a first agent which stimulates a TCR/CD3 complex-associated signal in the T cells; and

(2) a second agent which stimulates a CD9 antigen on the surface of the T cells.

16. The method of claim 15, wherein the first agent is an anti-CD3 antibody.

17. The method of claim 16, wherein anti-CD3 antibody is an anti-human CD3 monoclonal antibody.

18. The method of claim 17, wherein the anti-CD3 antibody is immobilized on a solid phase surface.

19. The method of claim 15, wherein the second agent is a ligand which binds a peptide comprising an amino acid sequence

$(Xaa_1)_n$-Gly-$Xaa_2$-Trp-Leu-$Xaa_3$-$Xaa_4$-Asp(Glu)-$(Xaa_5)_n$ (SEQ ID NO: 5), wherein $Xaa_4$ may or may not be present, $Xaa_1$, $Xaa_2$, $Xaa_3$, $Xaa_4$ and $Xaa_5$ are any amino acid residue and n = 0-20.

20. The method of claim 19, wherein $Xaa_2$ is Cys, Ile or Leu, $Xaa_3$ is Leu or Arg and $Xaa_4$, if present, is Arg, Pro or Phe.

21. The method of claim 16, wherein the second agent is a monoclonal antibody ES5.2D8.

22. The method of claim 16, further comprising:

b) separating the anti-CD3 antibody from the T cells and second agent;

c) monitoring proliferation of the T cells in response to continuing exposure to the second agent; and

d) restimulating the T cells with the anti-CD3 antibody and the second agent when the rate of T cell proliferation has decreased to induce further proliferation of the T cells.

23. The method of claim 22, further comprising repeating steps (b)-(d) to produce a population of T cells increased in number of from about 100- to about 100,000-fold the original T cell population.

24. A method for stimulating a population of $CD8^+$ T cells to proliferate, comprising:

a) contacting the population of T cells with an anti-CD3 antibody and a ligand which binds a CD9 antigen on activated T cells, under conditions appropriate for proliferation of the T cells;

b) separating the anti-CD3 antibody from the T cells and the ligand;

c) monitoring proliferation of the T cells in response to continuing exposure to the ligand; and

d) restimulating the T cells with the anti-CD3 antibody and the ligand when T cell proliferation has decreased to induce further proliferation of the T cells.

25. The method of claim 24, further comprising repeating steps (b)-(d) to produce a population of T cells increased in number of from about 100- to about 100,000-fold the original T cell population.

26. The method of claim 24, wherein the ligand binds a peptide comprising an amino acid sequence

$(Xaa_1)_n$-Gly-$Xaa_2$-Trp-Leu-$Xaa_3$-$Xaa_4$-Asp(Glu)-$(Xaa_5)_n$ (SEQ ID NO: 5),

wherein $Xaa_4$ may or may not be present, $Xaa_1$, $Xaa_2$, $Xaa_3$, $Xaa_4$ and $Xaa_5$ are any amino acid residue and n = 0-20.

27. The method of claim 26, wherein $Xaa_2$ is Cys, Ile or Leu, $Xaa_3$ is Leu or Arg and $Xaa_4$, if present, is Arg, Pro or Phe.

28. The method of claim 25, wherein the anti-CD3 antibody is OKT3 and the ligand is a monoclonal antibody ES5.2D8.

29. The method of claim 24, wherein the population of $CD8^+$ T cells is tumor infiltrating lymphocytes obtained from an individual afflicted with cancer and the method further comprises restoring the T cells to the individual.

30. The method of claim 29, further comprising genetically transducing the T cells and restoring the transduced T cells to an individual.

31. A substantially homogeneous $CD8^+$ T cell population produced by the method of claim 25.

32. A method for stimulating a population of $CD8^+$ T cells to proliferate, comprising:

a) obtaining peripheral blood leukocytes from an individual;

b) isolating a population of $CD8^+$ T cells from the peripheral blood leukocytes by negative selection with a combination of antibodies directed to surface markers unique to the cells negatively selected;

c) contacting the population of $CD8^+$ T cells with an anti-CD3 antibody immobilized on a solid phase and a ligand which binds a CD9 antigen present on activated T cells, under conditions appropriate for stimulating proliferation of the T cells;

d) separating the anti-CD3 antibody from the T cells and the ligand;

e) monitoring proliferation of the T cells in response to continuing exposure to the ligand by examining cell size; and

f) restimulating the T cells with the anti-CD3 antibody and the ligand when T cell size has decreased to induce further proliferation of the T cells.

33. The method of claim 32, further comprising repeating steps (d)-(f) to produce a population of $CD8^+$ T cells increased in number of from about 100- to about 100,000-fold the original T cell population.

34. The method of claim 32, wherein the ligand binds a peptide comprising an amino acid sequence

$(Xaa_1)_n$-Gly-$Xaa_2$-Trp-Leu-$Xaa_3$-$Xaa_4$-Asp(Glu)-$(Xaa_5)_n$ (SEQ ID NO: 5),

wherein $Xaa_4$ may or may not be present, $Xaa_1$, $Xaa_2$, $Xaa_3$, $Xaa_4$ and $Xaa_5$ are any amino acid residue and n = 0-20.

35. The method of claim 34, wherein $Xaa_2$ is Cys, Ile or Leu, $Xaa_3$ is Leu or Arg and $Xaa_4$, if present, is Arg, Pro or Phe.

36. The method of claim 32, wherein the anti-CD3 antibody is OKT3 and the ligand is a monoclonal antibody ES5.2D8.

37. The method of claim 32, wherein the population of $CD8^+$ T cells is tumor infiltrating lymphocytes obtained from an individual afflicted with cancer and the method further comprises restoring the T cells to the individual.

38. A monoclonal antibody which specifically binds a CD9 antigen present on activated T cells.

39. The monoclonal antibody of claim 38, which specifically binds a peptide comprising an amino acid sequence

$(Xaa_1)_n$-Gly-$Xaa_2$-Trp-Leu-$Xaa_3$-$Xaa_4$-Asp(Glu)-$(Xaa_5)_n$ (SEQ ID NO: 5),

wherein $Xaa_4$ may or may not be present, $Xaa_1$, $Xaa_2$, $Xaa_3$, $Xaa_4$ and $Xaa_5$ are any amino acid residue and n = 0-20.

40. The monoclonal antibody of claim 39, wherein $Xaa_2$ is Cys, Ile or Leu, $Xaa_3$ is Leu or Arg and $Xaa_4$, if present, is Arg, Pro or Phe.

41. A hybridoma designated by ATCC Accession No. HB11374.

42. A monoclonal antibody produced by the hybridoma of claim 65.

43. A peptide comprising an amino acid sequence $(Xaa_1)_n$-Gly-$Xaa_2$-Trp-Leu-$Xaa_3$-$Xaa_4$-Asp(Glu)-$(Xaa_5)_n$ (SEQ ID NO: 5), wherein $Xaa_4$ may or may not be present, $Xaa_1$, $Xaa_2$, $Xaa_3$, $Xaa_4$ and $Xaa_5$ are any amino acid residue and n = 0-20.

44. The peptide of claim 43, wherein $Xaa_2$ is Cys, Ile or Leu, $Xaa_3$ is Leu or Arg and $Xaa_4$, if present, is Arg, Pro or Phe.